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BAY STATE SKILLS CORPORATION



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(Annual report 1990)

1981

1982

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Developing

1983

1984

Successful Partnerships

1985

Between Industry and Education

1986

in Massachusetts



1987


1988

1989



1990

1991



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"THERE EXISTS WITHIN THE COMMONWEALTH A CRITICAL SHORTAGE OF TRAINING AND EDUCATIONAL PROGRAMS NECESSARY TO MEET THE GROWING NEEDS OF BUSINESS AND INDUSTRY FOR SKILLED EMPLOYEES AND THE CORRESPONDING NEEDS OF OUR PEOPLE FOR OPPORTUNITIES FOR NEW OR MORE REWARDING EMPLOYMENT.



"AS A RESULT OF THIS SHORTAGE BUSINESS AND INDUSTRY ARE UNABLE TO OBTAIN SUFFICIENT NUMBERS OF QUALIFIED EMPLOYEES FOR CONTINUED OPERATION AND EXPANSION WITHIN THE COMMONWEALTH.



"THIS SHORTAGE IS OCCASIONED BY THE INABILITY OF EDUCATIONAL INSTITUTIONS TO SECURE THE RESOURCES NECESSARY FOR THE DEVELOPMENT AND SUBSTANTIAL EXPANSION OF PROGRAMS OF SKILLS TRAINING AND EDUCATION WHICH ARE CONSISTENT WITH EMPLOYMENT NEED.



"BUSINESS AND INDUSTRY SUPPORT OF EDUCATIONAL INSTITUTIONS IS NECESSARY TO ENABLE EDUCATIONAL INSTITUTIONS TO

MEET THE NEEDS OF BUSINESS AND INDUSTRY FOR SKILLED EMPLOYEES AND THE NEEDS OF OUR PEOPLE FOR NEW OR MORE REWARDING EMPLOYMENT OPPORTUNITIES.



"EDUCATIONAL INSTITUTIONS ARE UNABLE TO ATTRACT SUFFICIENT SUPPORT FROM BUSINESS AND INDUSTRY WITHIN THE LIMITS OF THEIR EXISTING RESOURCES AND THROUGH THE NORMAL OPERATION OF THE PRIVATE ENTERPRISE SYSTEM.



"THEREFORE, IT IS FOUND THAT IT IS IN THE PUBLIC INTEREST OF THE COMMONWEALTH TO ENCOURAGE AND FACILITATE THE FORMATION OF COMPREHENSIVE COOPERATIVE RELATIONSHIPS BETWEEN BUSINESS AND INDUSTRY AND EDUCATIONAL INSTITUTIONS WHICH PROVIDE FOR THE DEVELOPMENT AND SIGNIFICANT EXPANSION OF PROGRAMS OF SKILLS TRAINING AND EDUCATION CONSISTENT WITH EMPLOYMENT NEED.



"THERE IS HEREBY CREATED A BODY, POLITICAL AND CORPORATE, TO BE KNOWN AS THE **BAY STATE SKILLS CORPORATION**



"THE MISSION OF BSSC IS TO DEVELOP THE PARTNERSHIPS NECESSARY TO FILL THE FUTURE SKILLED LABOR NEEDS OF THOSE MASSACHUSETTS INDUSTRIES THAT SHOW THE PROMISE OF EXPANSION IN THE NEXT DECADE, AND TO ASSIST THESE INDUSTRIES TO BECOME PRODUCTIVE AND GLOBALLY COMPETITIVE."



In the Beginning ...

The late 1970's spawned a new relationship between government and the people it serves. Government, both federal and state, no longer viewed itself as the sole solution to the myriad social and economic problems that exist in our society; instead, it began to see itself as a catalyst. Increasingly, government began aggressively to bring various sectors together: business, education, labor and human services were asked to define their common concerns, not their differences, and work to create solutions using their creative energies, multiple talents and combined resources.

Within this framework, education became a focal point.

In many ways Massachusetts recognized the importance of education and training earlier than many other states, perhaps because this state is so rich in educational institutions. Much of Massachusetts' economic vitality has been attributed to the high calibre of its universities and colleges which attract students who then often choose to stay and use their education to set up entrepreneurial enterprises. The importance of strengthening this educational excellence became a priority for economic development in Massachusetts in the late 1970's.

Schools and Companies Were Talking Past Each Other

But, while strengthening the economic base was recognized as important, there was also pervasive frustration and concern over the lack of communication between schools, training agencies and the private sector. At that time, there was a mis-

match between the skills being taught in schools and the jobs that were available to students when they graduated. Corporate executives were concerned about obsolete worker skills, sagging productivity and the impact of changing technology on the workforce. Educational institutions needed help to keep up with the changing technological equipment and expertise necessary for state-of-the-art training. Because business and education had not been coordinating their efforts, educators were not teaching what business needed, and businesses were resorting to pirating skilled employees from each other. As a result, there was serious concern that the economic growth of the Commonwealth of Massachusetts would be stunted if a dialogue could not be opened between government, education and industry to address the problem.

In 1981 the Bay State Skills Corporation was established as part of the solution. BSSC's fundamental role is to help business and the broad spectrum of private industries identify and solve their human resource needs by training people for real jobs.

What is The Bay State Skills Corporation?

At the most basic level the Corporation is a funding entity. BSSC awards contracts on a competitive basis to education and training institutions across the Commonwealth which develop partnerships with one or more companies and jointly train and educate the broad spectrum of people that make up the current Massachusetts' workforce: those who are employed, under-

employed or unemployed; those on welfare; college or university students; and displaced homemakers.

The Corporation works to meet two crucial needs for the future: the need to upgrade and re-train the existing workforce, and the necessity to prepare non-traditional workers for jobs in the future.

In the broadest sense, BSSC is an economic development tool. Economic development can be described as that collection of financial, development and investment incentives which help foster the financial prosperity of a business, a region or a state. While many see economic development as bricks and mortar, in a more fundamental sense economic development means investing in this state's human capital base - its workforce - to create the skilled labor that growing, healthy companies need. For it is only with a skilled workforce, that companies can grow. It is only when all Massachusetts residents are employed that the Commonwealth can share in the prosperity.

The Bay State Skills Corporation has been committed to investing in human capital from the very beginning. And BSSC is a market driven organization: the Corporation supports training activities only when companies step forward and participate in that training. BSSC believes education and industry must jointly shoulder the responsibility of preparing people for real jobs, in the real world - and that education and training programs must be designed to meet employer needs with direct employer input at each step of the way.

This joint responsibility - this shared opportunity - means a commitment to the short-

term and long-term value of bringing corporate and educational institutions together.

While this sounds simple in concept, it is more complicated in reality. Business and education do not have a tradition of working together. They often speak different languages and are skeptical, or even suspicious of each other's motives and abilities to deliver.

The Bay State Skills Corporation has operated on the conviction that it is important to foster business/education partnerships for several reasons.

Business Needs Education...

First, business and education each have some expertise that the other needs. Companies do not see education and training as their primary purpose, nor should they. While some companies do some superb work in training people once they have been hired, not every company has this capacity nor do companies train the general workforce. Yet in the short-term, industry depends on education to give them a qualified pool of applicants from which they can then hire.

And Vice Versa...

Education and training institutions can benefit enormously by having access to the technical expertise that companies have. Companies are often years ahead of where educational institutions can hope to be in technology, equipment and access to market needs. BSSC encourages both groups to work together to produce a qualified workforce, and by working together we believe they produce a better trained individual than they would if they worked apart.





And in the Long Run...

BSSC is also committed to encouraging long-term technology transfer to promote the transfer of cutting edge technology from the industrial setting into the classroom. The Corporation brings groups together, creates trust, builds mutual self interest in a project, and then steps back. By having brought industry and education together BSSC expects that they will continue to seek each other out long after BSSC has completed its investment, which will make both the education and training institutions and the industries stronger and more competitive.

Business and Education Sit Down Together and Talk Around the Table

A BSSC funded partnership requires that companies and educational institutions work together in a wide variety of ways. Companies donate equipment or material, and free up their technical employees to do the actual instruction. Internships are created at the workplace and schools and companies join together on advisory boards to plan out the education effort, mutually designing and planning the entire process. This close working relationship guarantees that each party has a stake in the outcome and becomes invested in each other's success.

A Strong Economy Means Jobs for all our People

The Bay State Skills Corporation administers three distinct programs to carry out its mission: Industry Responsive Training, Bay State Centers for Displaced Homemakers, and Employment

and Training Choices for Welfare recipients.

Each program targets a different segment of the available Massachusetts labor force. Not all jobs require advanced degrees or entry-level enthusiasm. Instead, the job mix in this state requires the energy, commitment and expertise of a wide range of workers. It is important that Massachusetts have available the workforce mix that companies need, and that education and training programs be available to all of this state's residents.

BSSC's **industry responsive** training program is geared to setting up new educational programs aimed at this state's changing technologies. Each BSSC grant under this program requires an equal match of private sector funds and hence is often called the 50/50 program: 50% of the cost of a program is paid for by BSSC, the other 50% comes from direct or in kind company support. Both BSSC dollars and private sector match are awarded to an educational institution. The 50/50 program supports the development of new education and training programs across the educational spectrum, from community based organizations to vocational schools, from community colleges to colleges and universities. Anyone can attend a BSSC 50/50 funded program in contrast to the narrowly targeted federal categorical programs: working professionals, college students, the unemployed, or adults changing careers. Over the years the 50/50 program has supported the development of programs in fields as varied as fiber optics, biotechnology, respiratory therapy, computer integrated manufacturing, statistical

process control and manufacturing engineering. Programs can run from 6 months to 18 months, they can be day time or evening programs. The primary criteria is that the education and training be oriented towards an area where industry has specific skill gaps to fill, that companies participate directly in each program, and that the private sector match the BSSC grant award, dollar for dollar.

The **Bay State Centers for Displaced Homemakers** is BSSC's second major activity. Funded with both a direct state appropriation as well as a sub-contract from the Department of Public Welfare, the Displaced Homemaker Program serves approximately 2,500 women each year who are going into the workforce for the first time.

Displaced Homemakers are women, generally over 30, who have been supported by others while working in their home. They suddenly need to support themselves and enter the world of work because of unexpected and difficult circumstances such as death, divorce, disability of a spouse, or the loss of public assistance. They are displaced from their homes, into the workforce, hence the name. They often lack the job skills, work experience and confidence needed to enter the labor market readily. Yet, over the years at home, these women have gained many skills and with assistance can become valuable contributors to the workforce.

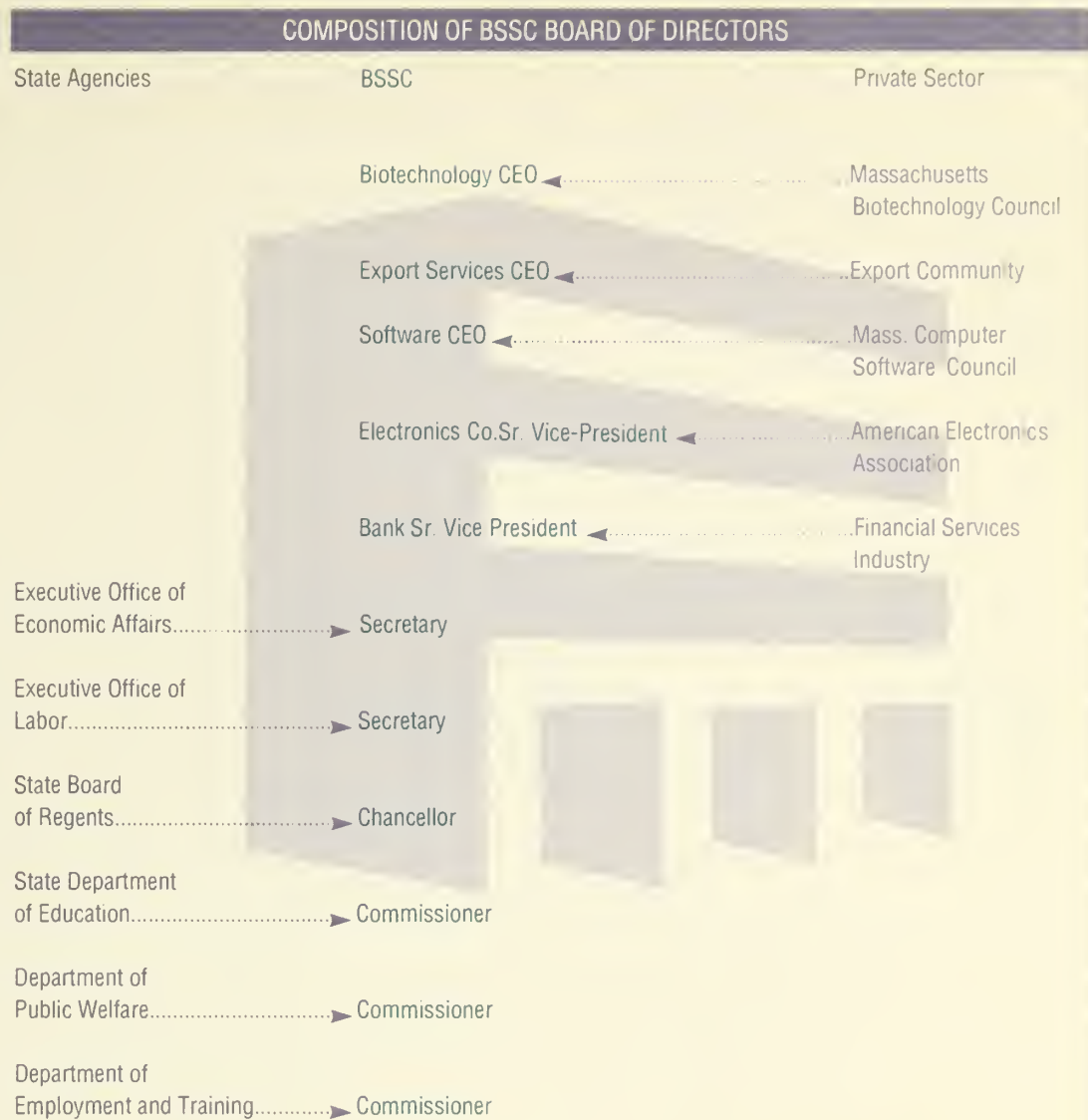
BSSC directly supports five regional Displaced Homemaker offices across the state and 19 satellite offices, each of which is staffed with personnel expert in counseling, referral, education and training, and job development and placement.

The Bay State Program to provide education and training to welfare recipients is BSSC's third major program. In 1983, BSSC began this state's first effort to establish training programs for Welfare recipients with direct industry participation. In 1984, the Department of Public Welfare took note of BSSC's success in designing its ET Choices program and contracted with BSSC to expand the existing programs of skills training. The Corporation's activities have grown here every year, since 1984. The Department of Public Welfare views BSSC as the model builder for the ET system. The Corporation has aggressively instituted new training programs to prepare people for a variety of jobs, from health care, to human services, to manufacturing. Each year BSSC selects approximately 1,000 welfare recipients, trains them, gives them skills and confidence, and puts them into full-time jobs, on the road to economic independence.

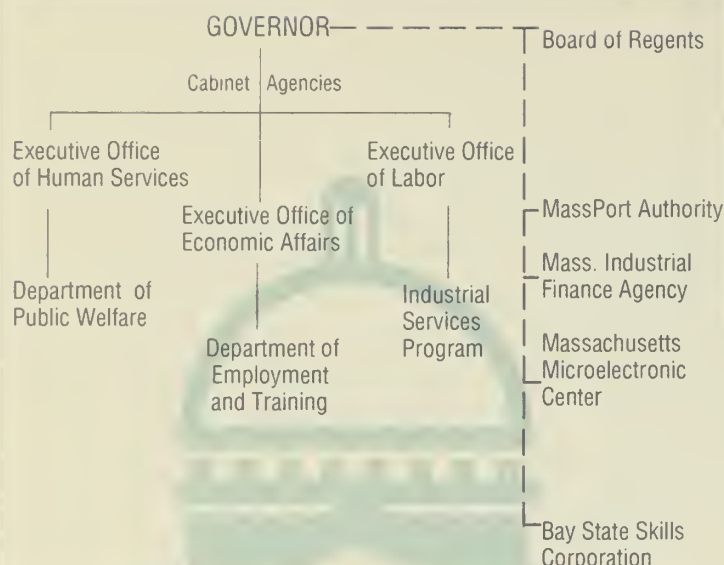
Organizational Structure

Animal, Vegetable, or Mineral?

The Bay State Skills Corporation is a "quasi-public" Corporation. This means it is a Corporation created by an act of the State Legislature, for a public purpose, funded with public dollars. As such, the Corporation carries out a public policy mission. But as a quasi-public Corporation, it also means that BSSC operates outside of the Commonwealth's direct personnel, and budget authority, and has a wide degree of administrative flexibility which is essential in enabling the Corporation to respond quickly and efficiently to business' needs.



RELATIONSHIP OF BSSC TO EXECUTIVE BRANCH



The Corporation is governed by a 19 member Board of Directors each of whom is appointed in staggered terms by the Governor. The Chair of the Board has traditionally been the State Secretary of Economic Affairs, although the law states that the Governor may choose any member of the Board to be Chair. The Board represents a cross section of the Commonwealth's business, education, community and governmental interests.

By law, the Board meets quarterly and has the responsibility to set the direction for the Corporation and approve all expenditures of funds. Given the diversity of the Board, it is also a forum where ideas are exchanged, where philosophies about the role of the public and private sectors in economic development are discussed at length, and where the mandates for change, experimentation, and risk taking are encouraged.

BSSC submits its annual funding request to the Legislature through the Executive Office of Economic Affairs. And BSSC submits detailed program and budgetary reports on a quarterly basis or when requested, to a wide variety of executive offices and legislative committees. The Corporation operates with the direct oversight of the Board of Directors and with the indirect input of a variety of executive and legislative offices.

Staff Operations

How Big is BSSC?

The Corporation is administered by an Executive Director. She in turn, has three Program Managers who report directly to her, each of whom administers one

of BSSC's three programs:

- Industry Responsive Training
- Displaced Homemaker
- ET CHOICES

In 1990, the Corporation had a total staff of 15, including clerical support, financial monitoring and accounting staff, and Program Specialists, each of whom works directly with the contractors BSSC funds and manages them for success. The Corporation is located in downtown Boston.

Coordination With Other State and Private Entities

The Bay State Skills Corporation operates as a free standing, independent entity within the Commonwealth. But given the Corporation's mission of education, employment and training there are a variety of informal mechanisms BSSC uses to carry out its work.

No good organization operates in a vacuum - and BSSC is no exception. Through its Board of Directors, BSSC has access to the staff, information, and policy decisions of a wide variety of state entities involved in education and training including the Department of Employment and Training, the Department of Public Welfare, the State Department of Education and the Board of Regents of Higher Education. Because of the direct participation on the Board of the Secretary of Economic Affairs, BSSC has access to a wide variety of state economic development initiatives including the state's efforts in international trade and business assistance. And being a quasi-public Corporation, BSSC has regular conversations with other quasi-public authorities, many of which provide investment capi-

tal, industrial revenue bond financing or technical assistance to emerging industries.

And finally because of the input of the private sector members of the Board of Directors, BSSC has direct access to corporate executives in many of this state's growth industries: high technology, biotechnology, computer software, engineering, health care, and financial services. Board meetings are a place where all these different perspectives come together to act on how to invest in this state's best natural resource - our people.

But, given cooperation, many people still ask: how does BSSC differ from JTPA (the federal job training system), or the Board of Regents, or the Industrial Services Department - or others?

The answer is both structurally and philosophically.

Structurally, BSSC oversees no formal system, no collection of training organizations, no educational institutions. BSSC cannot change higher education in Massachusetts by directive; it cannot determine state investment decisions; it cannot mandate industrial policy.

Instead, BSSC can lead by example, and influence the direction and makeup of educational activities by advice and by practice. It can identify growth areas and develop the initial education response; it can establish cooperative training arrangements involving a broad cross-section of educational deliverers; it can convene meetings of senior corporate personnel from a cross-section of industries, and senior faculty members from a cross-section of colleges and universities and plan out the be-

ginnings of a state response to an exciting industrial opportunity. BSSC can draw upon the resources of state and local officials, corporate and educational personnel, human service providers and local training agencies and have them all come together to solve a problem. Perhaps BSSC can move easily in and out of different worlds precisely because the Corporation is not a threat to any one of them.

BSSC has been referred to as an economic development tool, an educational foundation and a venture capital firm dedicated to providing seed money for new industry-education partnerships.

BSSC invests in educational institutions and funds technology transfer programs, which strengthen the ability of these institutions to respond to the rapidly changing needs of industry, and create some common ground between business and education, at all levels.

Philosophically, BSSC also has a mission that differs from others. While many government and private organizations operate under the mandate of short-term horizons and quick results, BSSC has greater latitude. BSSC looks 5-10 years ahead, to uncover the trends of where industrial growth is taking place, and develops the early seed programs needed to create the workforce for the future. BSSC tries to support programs that other organizations cannot, create partnerships that have not existed before, take risks that others may not be able to. BSSC does not try to duplicate what JTPA does, or compete with the Board of Regents, or infringe on activities of the State Department of Education or re-

BSSC ORGANIZATIONAL CHART

BSSC

BSSC Executive Director

Controller
Fiscal Staff



Industry Responsive
Training 50/50
Director
Program Staff

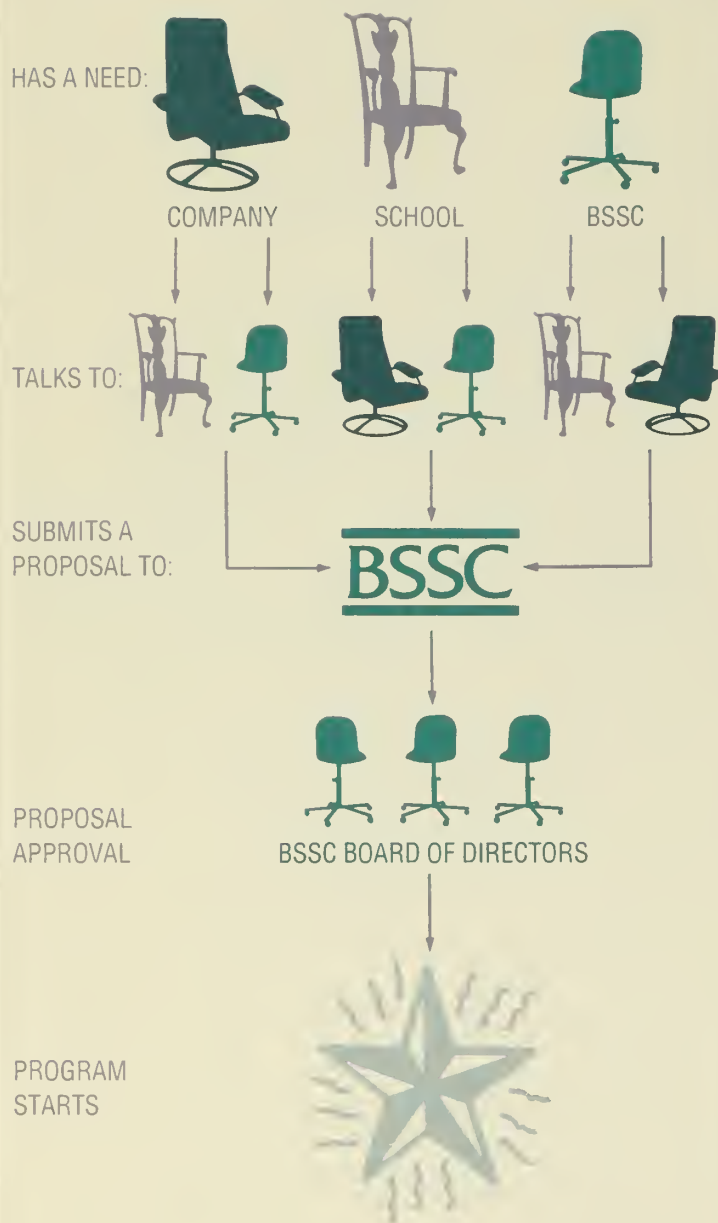


Displaced
Homemakers
Director
Program Staff



ET Choices
Director
Program Staff

HOW PARTNERSHIPS HAPPEN



place the activities of the Massachusetts Biotechnology Council. Instead, the corporation tries to carve out a niche of starting up activities that support other state activities, of pushing industry-education partnerships to their fullest limit and creating some educational initiatives which in the long term are passed back to the larger educational systems and incorporated by them.

How Do Programs Get Started?

If I am a company, need quality control technicians and can't find them, how can BSSC help me?

If I am a professor and know there is a need for my students to take courses in biochemical engineering, how can BSSC help me?

If I am a Director of Economic Development, am wooing a company to relocate to my town - and want to guarantee them a ready made workforce when they open their doors, how can BSSC help me?

If I am Governor and want to increase Massachusetts' commitment to creating a more technologically-literate workforce, how can BSSC help me?

In short, how can BSSC work for me? What do I have to do?

These are the kinds of questions BSSC is asked all the time. In answering these questions, perhaps it would be useful to describe the generic BSSC funding and support process and then review some specific examples of how BSSC works.

Can we Talk?

By law, BSSC is only allowed to fund education and training institutions, contract with them

and pay them to do education and training. BSSC cannot fund companies directly. That means that in every case where BSSC is asked to help industry's needs, an educational institution and a company must come together, sit down, talk about their mutual needs and then plan out an educational program in which both the school and the company will participate. The direct call for BSSC help comes when an educational institution submits a plan of action - a proposal - to BSSC for funding. BSSC reviews the proposal, checks that the need is real, and recommends the proposal to its Board of Directors for action. Once the Board approves the proposal, BSSC enters into a contract with the education and training institution and starts a long-term relationship. BSSC program staff are available to the school and company for the duration of the training effort to help the program succeed. BSSC, the company and the school are all geared for success.

But Who Makes the First Move?

The first step can be taken by a company, an education and training institution or BSSC.

In 1987, the General Electric Company in Fitchburg put out a call for help. The plant was taking on work from other plants because of a company wide consolidation plan and found it needed 100 additional machinists. G.E. called BSSC and the local community colleges and asked all three groups to sit down to talk about what to do. Mount Wachusett Community College said it could do the training and BSSC said it would pay for the costs. The local

Chamber of Commerce, a local vocational school and the local Department of Employment and Training office all sat down to do their share and produced 100 quality machinists - fast.. In 10 months, General Electric got its workers and a long-term education exchange between the Chamber, the vocational schools and the community colleges was put in place.

In 1988, a University took the first step in setting up a program to meet industry's needs. Several faculty and administrators from the Boston University School of Medicine began some informal conversations with senior managers from various biotechnology companies about what kinds of training needs they had. During the course of those conversations, the company people commented on the fact that there was really no place in Massachusetts where they could send their more junior people for quick brush-up courses on various aspects of biotechnology. Most of their workers had taken courses in college, but for many that was some time ago and their skills and knowledge were getting rusty. "What if we established a series of one semester brush-up courses, would that fit your needs?", asked the University. The answer that came back from industry was a resounding "Yes". With the input of the biotechnology companies, Boston University set up six module refresher courses and came to BSSC for a grant to support this effort. BSSC agreed. In this instance, Boston University took the first step because it had personal knowledge of the companies' needs.

In another example, the Economic Development Office in

Fall River approached BSSC to see if the Corporation could help meet the training needs of Deknatel, a medical products manufacturing company that the city was seeking to attract to the Fall River area. BSSC worked with the city, the company and Bristol Community College and funded a 12 month program that eventually trained 300 unemployed and underemployed individuals to work full-time for the company. Because the City planned ahead, the training started early and a full-time, well trained workforce was available when the company opened its doors for business.

Finally, BSSC can initiate the process itself. In 1989, BSSC met with the leaders of the Massachusetts Biotechnology Council over breakfast to ask how the Corporation could best assist those companies with their human resource needs. During that conversation company CEO's said they felt there was a two-fold need: first, the need to establish an entry-level curriculum to train manufacturing/production workers, and second, the need to produce more science-aware/science-friendly high school graduates over the next 10 years. BSSC took these comments to heart. Within twelve months BSSC had funded the start of two year-long manufacturing programs at Middlesex Community College and Mass Bay Community College, and contracted with 5 educational institutions to run Special Institutes for 100 middle and high school teachers across the state. The Special Institutes, taught by university and industry professionals alike, exposed teachers to biotechnology and gave them the knowledge, the tools and the lesson plans they

CONTRACT AWARDS & PRIVATE SECTOR MATCH

| | BSSC CONTRACT DOLLARS | PRIVATE SECTOR MATCH |
|-------|-----------------------------|----------------------------|
| 1982 | \$1,476,789 | \$2,021,940 |
| 1983 | 4,847,465 | 2,848,136 |
| 1984 | 5,193,971 | 3,464,950 |
| 1985 | 4,457,334 | 3,753,157 |
| 1986 | 4,872,703 | 4,379,996 |
| 1987 | 3,314,710 | 3,562,728 |
| 1988 | 3,946,191 | 3,826,456 |
| 1989 | 3,463,628 | 1,384,993 |
| 1990 | 3,974,410 | 2,271,663 |
| TOTAL | \$35,547,201 | \$27,513,919 |

NUMBER OF INDIVIDUALS TRAINED

1982 1,832

1983 6,198

1984 5,404

1985 4,869

1986 4,368

1987 3,872

1988 3,965

1989 3,379

1990 2,499

TOTAL 33,887

needed to take this learning back to their classrooms - and their students.

In short, program ideas can come from many levels. BSSC's responsibility is to be open to the needs of the business community and establish a variety of creative education and training programs needed to prepare people for changing economic needs.

But What is the Bottom Line?

It is difficult to summarize in one report all that the Bay State Skills Corporation has accomplished over the past nine years. At the individual level thousands of people have received industry specific training and have been hired into good, long-term jobs with career advancement. Dreams have been realized and lives have been changed.

But BSSC has also had an impact on the way in which educational institutions in Massachusetts respond to the economy. Brand new industrial concentrations and areas of expertise have been built at community colleges, colleges and universities across the state. A generation of educational entrepreneurs has come into their own, faculty members who keep their ears to the ground of Massachusetts' industrial highways, know what industry needs, and are ready to respond.

And finally, thousands of Massachusetts companies have had access to a new group of skilled and motivated Massachusetts workers. These companies have been able to grow and expand and prosper in large part because of a skilled, available workforce.

On June 12, 1990, the *Boston Globe* printed its annual list of the top 100 Massachusetts growth companies for 1989-1990; in that year BSSC had linked up with 27 of the top 100. This is but one small snapshot in time, but it illustrates in a very direct way that BSSC is training people for the job demands of growing, successful, Massachusetts companies.

Some hard data on BSSC's track record show the results:

Between 12/1/8 - 6/30/90, BSSC has:

- awarded 558 grants, totalling \$35,548,000 to more than 200 educational institutions state-wide;
- generated \$27,514,000 in match from more than 1,000 separate private sector partners, many of whom have worked with us three, four, or five times;
- trained 36,336 people and placed 84% of them into full-time employment.

Major new educational offerings have been put in place at community colleges, colleges and universities across the state, and brand new courses have been offered in a wide variety of fields that reflect the economic growth and diversity of this state: machining, manufacturing engineering, total quality control; fiber optics, electro-optics; bio-engineering, bio-processing, biotechnology; computer engineering, computer software, technical writing; LPN - RN articulation programs, nurse refresher programs, respiratory therapy, patient care assistance; waste water treatment operators; word processing, legal secretarial training, clerical office training; international trade and management, foreign trade documentation specialists, prop-

erty management; day care, mental health and mental retardation. In short, BSSC's training has been directed toward the major growth sectors of this state's economy.

A look at several examples of programs that BSSC has sponsored charts where BSSC has been, is now, and will be in the future.

Where Has BSSC Been?

Workforce Competitiveness in the Manufacturing Sector: Total Quality Control

In 1986, BSSC was approached by GOAL, a training alliance in Lawrence, and was asked to support a program to introduce existing middle level management workers to the importance of using statistical process control (SPC) in the day to day work of their manufacturing firms. GOAL was impassioned about the need to get workers familiar with the entire production process, to encourage them to take ownership of what they were doing; in short, to change America's production mode from one in which workers do their part of the production in isolation, to one in which workers have a stake in the entire process and are valued for the suggestions or input they make in creating a better - and often less expensive - total quality product.

GOAL asked BSSC to fund a program which would bring the Deming/Juran method of production to the Massachusetts workplace.

BSSC listened to their needs, and was persuaded. And a first effort in training existing workers to the importance of total quality began. The first set of

"trainees" were employees of small manufacturers, all of whom were suppliers to the automotive industry in Detroit. The large automotive manufacturers had mandated that their suppliers be able to demonstrate their adherence to SPC. As such, the training was not just an academic exercise, it was a fight for their survival.

GOAL's Suppliers Institute was very successful and BSSC began to be approached by an increasing number of companies with a need to help them train their existing workforce in the basics of total quality management.

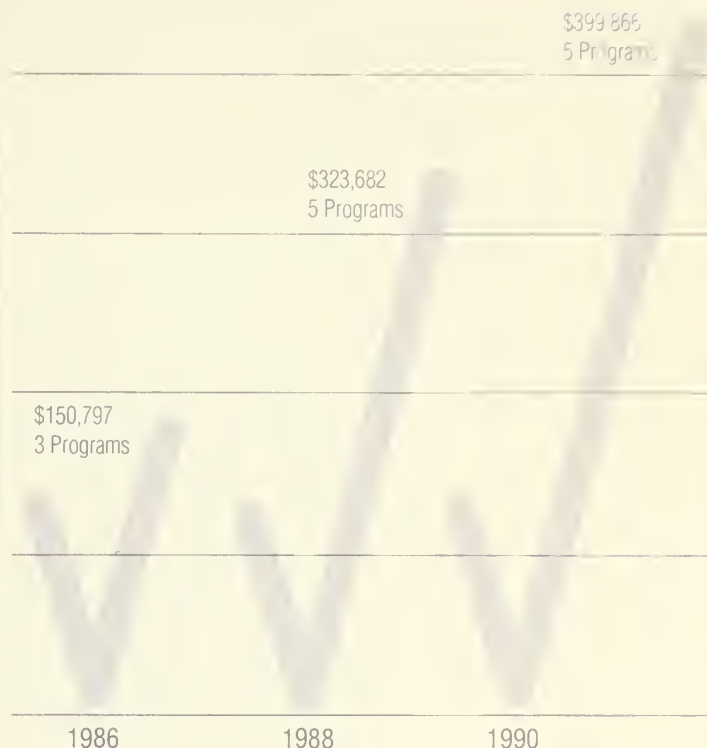
By 1989, BSSC had increased its effort in SPC/TQM and had supported eleven separate total quality management programs for a variety of traditional industries including rubber, plastics, furniture, construction, machine tool and automotive. And BSSC had funded the University of Lowell, and the University of Massachusetts at Amherst to establish two long-term centers for productivity and total quality management which will continue to operate on their own, and provide technical assistance to area manufacturers - now and in the future - without BSSC financial support.

Massachusetts industry is aware of the need to compete nationally and internationally on the quality and price of products manufactured here. BSSC believes that the foundation of educational expertise that has been created through BSSC funded total quality management will pay direct dividends - now and in the future.

Special Institutes-The Need to Invest in our Teachers

The basic premise of the Bay State Skills Corporation is that

BSSC SUPPORT FOR TOTAL QUALITY MANAGEMENT



From 1986-1990 BSSC supported 20 Total Quality Management Programs and contributed \$1,485,452.



education needs to be infused with direct industry input, and that occupational learning can be effective only if students are exposed to the industrial applications of what they are being taught.

But while the focus of teaching often looks at what the students are learning, there must also be a focus on what teachers know how to teach. Technological changes and emerging new industries require that faculty members understand these changes quickly, and be able to teach their students according to industry guidelines.

But how do faculty members stay up to date? How can they be exposed to technological innovation? How do they stay on the cutting edge? The answer must be that they, themselves, receive training and industry exposure.

In 1985, BSSC instituted a new concept: summer workshops for vocational, college and university faculty in emerging technologies, taught by faculty and industry members alike, focusing on exposing faculty members to industrial changes and giving them the tools they need to take what they have learned back into the classrooms.

Over the past 5 years, BSSC has funded 52 special institutes in a wide variety of fields that mirror the Massachusetts economy: microcomputer software; computer integrated manufacturing; computer graphics; fiber optics; robotics and flexible manufacturing; waste water management; very large scale integration; desktop publishing; and biotechnology. BSSC has invested money to train 1,077 teachers statewide,

and over 278 companies have matched the BSSC investment with \$1,610,522 in-kind of private sector contribution.

These Special Institutes have helped rejuvenate college and university faculty, and these faculty members have taken their new found learning back to the classroom and in many instances, gone far beyond BSSC's expectations. New courses have been developed and brand new curricula have been put into place, without the need for additional BSSC/state support.

Industrial Waste Water Treatment-The Need for Safer, Environmentally Prepared Workers

In 1984, the Massachusetts Attorney General's Office filed suit against a south shore company for violating pollution control regulations. The company agreed to pay a fine but stated in its final agreement that part of its problem had been the inability to find trained and qualified industrial waste water treatment operators. The company stipulated - and the Attorney General's Office agreed - that the Bay State Skills Corporation should be given \$500,000 of the fine money to establish a series of courses to train Massachusetts workers to be industrial waste water treatment operators.

BSSC set about the task by first establishing a statewide advisory committee made up of industry representatives, state regulators from DEQE and DEM and university representatives. BSSC wanted industry input into the program that was to evolve and wanted their participation up front. The advisory committee

discovered that there was no existing curriculum in Massachusetts which covered the vital issues of industrial waste water treatment, so BSSC commissioned Northeastern University to develop the curricula. Between 1984 and 1986, BSSC set about to train educational faculty on how to teach this material, established the examination tests and requirements to test waste water treatment operators, and funded ten educational institutions across the state to establish training programs in this field.

By 1988, programs were up and running, over 120 companies were contributing their time and energy to make those programs industry specific, and over 446 people had been trained to be industrial waste water treatment operators.

In short, BSSC was able to take an industrial need and build the educational infrastructure for this need to be met.

Biotechnology-The Next Industrial-Scientific Revolution

The greatest economic development engine that Massachusetts has is the existence of a superb higher education infrastructure. Massachusetts colleges and universities are some of the best in the world. They attract outstanding students and professors and become a rich breeding ground for entrepreneurs who use their education to start up small, often technologically based, businesses.

The biotechnology industry in Massachusetts has developed because of the existence and interrelationships between these educational institutions and outstanding medical re-

search and teaching facilities.

But like many other emerging industries, biotechnology grew quietly, in the background, for many years without much public attention - or understanding.

BSSC first heard the word "biotechnology" in 1983 when Tufts University approached the Corporation asking for financial assistance to develop a biochemical engineering course that would be given to the university's existing engineering students and help prepare them for employment in the biotechnology industry. Like much of the public, BSSC had little understanding of what biotechnology was or where it would lead, but the Tufts request met BSSC's criteria in several ways:

► The university had identified seven biotechnology/medical companies that were willing to work with it and provide match.

► The course would expand the university's already substantial offerings and make its students better prepared to work in Massachusetts-based companies.

► The university said, if successful, it would continue to offer the course, after BSSC funding was spent.

► And, finally, biotechnology seemed to fit BSSC's issue of preparing Massachusetts' workers for the future.

The rest, as they say, is history.

Since 1983, BSSC has invested over \$1,000,000 in state funds which have been more than matched by \$1,500,000 in private sector donations. Over 95 companies have participated,

SUPPORT FOR THE BIOTECHNOLOGY INDUSTRY IN MASSACHUSETTS 1983-1990

| Tufts University | Worcester Polytechnic Institute | Boston University | Others |
|---|---|---|---|
| 1983 Biochemical Engineering (31 Working Professionals) | | | |
| 1984 Special Institute Faculty Development Recombinant DNA, Tissue Culture (17 Faculty) | | | |
| 1985 | Special Institute Protein Purification Separation Techniques (20 Faculty) | | |
| 1986 Biotechnology Process Development (31 Students for Placement) | Protein Purification/ Separation Methods (23 Graduate Students) | | |
| 1987 Biotechnology Processing (15 Graduate Students) | Special Institute Mammalian, Plant, Insect Culture (20 Faculty) | | Southeastern Massachusetts University Marine Biology (11 Graduate Students) |
| 1988 Membrane Separation (15 Graduate Students and Working Professionals) | | Biomedical Laboratory (2 Courses) (25 Working Professionals) | |
| 1989 | | Biomedical Laboratory (3 Courses) (25 Working Professionals) | Becker Junior College Biotechnicians (14 Employed People) |
| | | Biomedical Laboratory (6 Courses) (75 Working Professionals) | |
| 1990 | Fermentation/ Downstream Processing (24 Graduates/ Working Professionals) | | Special Institutes Teachers, Grades 7-12 Northeastern University Boston University Worcester Polytechnic Institute University of Lowell Education Development Center Certificate Programs Mass. Bay Community College Middlesex Community College |

575 individuals have been trained in this field and BSSC has been able to help Massachusetts develop a strong educational program which can produce senior engineers as well as entry-level manufacturing workers for this growing industry.

BSSC's initial investments supported training for baccalaureate and post baccalaureate degrees to meet industry's needs for skilled research and development workers. As the companies' needs have grown requiring technicians and production workers, BSSC has paralleled this change by supporting middle and entry-level programs.

It is perhaps not coincidental that during the period of BSSC investment, from 1983 to 1989, the number of Massachusetts biotechnology companies grew from 26 in 1983 to 76 in 1989.

Can investment in education and training help spur economic development in new and emerging industries? You bet it can.

Where We Are Going

Exporting in the 90's - The Far Side

Massachusetts companies have long realized there is a vast market for their products beyond our shoreline. What has been less clear to them, however, is whether they could access these markets themselves, and if so, what they would need to learn to open up these markets, and where they could they find the skilled people to help them chart their course.

In 1990, the Commonwealth of Massachusetts embarked on a major effort to

inform the business community of the richness of the international marketplace. And BSSC was asked to develop the educational component of this awareness effort.

International trade is not a new area to BSSC; in the mid '80's BSSC responded to the needs of 8 high technology companies who needed to give their middle managers additional training by funding a one-year program at Boston University in Multinational Marketing. But the Export 90's effort called for more broad based exposure, and not necessarily classroom training. BSSC responded aggressively:

► **First**, BSSC developed a database of information on the capabilities of 250 separate companies and educational institutions. With this database other Massachusetts companies now have a place they can turn to when they need access to export related training.

► **Second**, BSSC is working directly with a variety of local economic development agencies and industry associations to help them learn how to export. In Fall River, BSSC has funded the Southeastern Massachusetts Partnership to recruit 30 local companies and give them the basics of how to prepare for upcoming trade talks with delegations from Portugal and Canada; BSSC is working with the Furniture Manufacturing Association in Gardner to help them learn what they need to know to export their furniture to Japan, and the Corporation is continuing this local outreach and training effort with industry groups in the metal trades in Worcester to provide direct training assis-

tance for local machining companies.

As a state, Massachusetts is becoming more aggressive in obtaining the knowledge it needs to have to export. Like other areas of economic development, learning to export well and position ourselves effectively will take time. BSSC has made the commitment to see this effort through.

Displaced Homemakers - Our mothers, daughters, sisters - and former wives.

Americans know by now that the makeup of this country's workforce has changed. Twenty-five years ago, new workers were predominately young, white and male. But today - and for the foreseeable future - the new workforce includes a predominance of older workers, minorities and women.

There are close to 200,000 displaced homemakers in Massachusetts. Displaced Homemakers are primarily women, over 30, who are forced by economic necessity to exchange their full-time unpaid work in the home - as wives and mothers - for outside paid employment, because their husbands have died, or divorced them or because their children have grown older and they are no longer eligible for state welfare assistance. Like all new workers, these women need education and skills to become fully contributing members of the economy. And like increasing numbers of new workers these women have an equal need for confidence, for road maps and guideposts that will help them become successful workers. Displaced Homemakers need counseling and finan-

cial planning help, they need assistance in understanding what work and education choices they can make, they need help to recover from abusive environments, and they need follow-up help once they are on the job.

The Bay State Centers for Displaced Homemakers reach out to as many of these women as is possible, where they live. BSSC operates regional offices in Boston, Worcester, New Bedford, Lowell and Pittsfield and twenty satellite offices spread across the Commonwealth in the most suburban and rural areas of this state. Displaced Homemakers are welcomed at these Centers every day. They are greeted by a counselor who is assigned to them; they are screened, tested and guided to enter education, training programs or direct job placements. The Bay State Centers have coordinated BSSC supported activities with other state assistance programs that are paid for by the Departments of Education and Public Welfare, by the Older Workers Network and the Industrial Services Program. The Displaced Homemaker Centers represent the best examples of state coordination of services.

Some Displaced Homemakers will use the services of a Center for several months, others will find the help they need in a week and move onward. But all of them are welcomed to make these Centers their Centers, as a place they can come back to for ongoing support, assistance and guidance.

The Bay State Centers for Displaced Homemakers have received national recognition as an exemplary program and BSSC Displaced Homemaker staff have

been called upon to help other states shape their own program.

Each year, BSSC works with approximately 2,500 displaced homemakers; over the past 9 years this means a total of 22,000 women have been served - only a fraction of the estimated 200,000. But lives have been rebuilt and families have been pulled together again. And Massachusetts employers have hired close to 10,000 committed, experienced and mature workers.

Our economy is making room for the new workforce and the Bay State Skills Corporation is proud to be doing its share.

Caring for our Citizens - The need is great.

Human services is big business in Massachusetts.

The departments under the state's Executive Office of Human Services directly employ approximately 40,000 people. In addition, the Commonwealth contracts \$900,000,000 a year with private provider agencies for an extensive array of services. These providers employ over 30,000 people. The human service industry is constantly looking for direct care staff to work in residential programs for the mentally retarded and the mentally ill, in day care programs for young children, and in many other social welfare agencies.

The human service industry has major human resource needs. In order to keep pace with the turnover and increasing demand, Massachusetts estimates that approximately 20,000 new people must be attracted to enter this industry, each year. It is a massive task.

The problem has been that the employment and training system has not recognized that

BSSC SUPPORT FOR THE HUMAN SERVICES INDUSTRY-1990

Day Care/Child Care Teacher Training

Aquinas Junior College
Newton
12 Trainees

Elm Park Center for Early Childhood Education
Worcester
20 Trainees

Quincy Junior College
Quincy
12 Trainees

Valley Opportunity Council, Inc.
Chicopee
20 Trainees

Wheelock College
Boston
12 Trainees

Total number of Day Care and Child Care Trainees: 76
BSSC Support: \$204,534.

Mental Health/Mental Retardation Workers

Berkshire Community College
Pittsfield
9 Trainees

Bristol Community College
Fall River
18 Trainees

Cape Cod Community College
Hyannis
9 Trainees

Dimock Community Health Center
Boston
28 Trainees

Massasoit Community College
Brockton
18 Trainees

Middlesex Community College
Bedford
9 Trainees

Mount Wachusett Community College
Gardner
9 Trainees

North Shore Community College
Beverly
18 Trainees

Quinsigamond Community College
Worcester
18 Trainees

Roxbury Community College
Roxbury
24 Trainees

Springfield Technical Community College
Springfield
20 Trainees

Total Number of Mental Health Trainees: 180
BSSC Support: \$359,610.

training for these jobs needs to take place, that there are good jobs, at good wages to be had by many. In 1987, there were only two small pilot programs in place to train workers for long-term residential care facilities.

In 1988, BSSC decided to step up the pace. Under contract with the Department of Public Welfare BSSC trains approximately 500 AFDC recipients each year for full-time jobs in growing industries. In 1988, the Department asked BSSC to concentrate on training people for health and human service careers, and BSSC responded. Working with the Commonwealth Careers Project, BSSC helped pull together the expertise, funding and energy of the Departments of Education, Mental Health and Mental Retardation; within six months these four agencies created a pool of \$400,000 and funded 10 community colleges across the state to train almost 350 people, including 140 welfare recipients, to be mental health and mental retardation workers.

This effort has underscored the success that can happen when different agencies with complementary missions work together to train for growing industries:

- a joint funding pool of \$400,000 was created by four agencies;
- a single, joint RFP was issued;
- a joint contracting system was developed;
- a joint program monitoring system was implemented; and,
- a model of coordinated services was put in place.

This commitment has been continued and over three years almost 1,100 individuals

will have participated in training to become mental health and mental retardation workers. Equally important, the training system has begun to comprehend the enormity of the task that exists to meet the needs of the human services industry.

In the years to come, training activities in this field will increase, and the Bay State Skills Corporation is proud that with the cooperation and joint funding of four state agencies we have begun the task which will point many Massachusetts workers towards rewarding and critically important careers.

BSSC Staff

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And the Future...

The Bay State Skills Corporation has established itself as an organization that anticipates the future- and works toward it with enthusiasm. BSSC is committed to identifying growth industries, testing and piloting new training ideas and taking risks.

The future is upon us now- and the Bay State Skills Corporation is prepared to embrace these changes and change with them-to help build a stronger, more vibrant Massachusetts economy.

Susan K. Moulton
Executive Director
Bay State Skills Corporation

PRIVATE SECTOR PARTNERS

ACCT, Attleboro
 A/G Technology Corporation, Needham
 ASIC Engineering, Inc., Brighton
 AT&T Network Systems, N. Andover
 AT&T Communications, Fairhaven
 A.W.Chesterton Company, Stoneham
 Accu-Tron, Inc., Millis
 Adams-Russell Electronics Co., Inc., Amesbury
 Adia Personnel Services, N. Dartmouth
 Aldus Corporation, Boston
 Alpha Industries, Inc., Methuen
 Alstarr Enterprises, Inc., Wilbraham
 Altran Corporation, Boston
 Amicon Div./W.R.Grace & Company, Danvers
 Analog Devices, Norwood
 Appalachian Engineering, Pittsfield
 Apple Computer, Inc., Marlborough
 Aritech Corporation, Framingham
 Ascension Technology, Lincoln
 B&C Machine, Inc., Haverhill
 Balfour, Attleboro
 Bank of Boston, New Bedford
 Bank of New England, Worcester
 Baroco, Inc., Northampton
 Bay State Nissan, Springfield
 BayBank/Middlesex, Everett
 Berkmatix, Inc., No. Adams
 Beth Israel Hospital, Boston
 Biogen, Inc., Cambridge
 Bioprocess Engineering, Inc. Worcester
 Biotechnica International, Inc., Cambridge
 Blue Cross/Blue Shield, Boston
 Bolt, Beranek and Newman, Cambridge
 Bon Secours Hospital, Methuen
 Boniface Tool & Die, Inc., Southbridge
 Bose Corporation, Framingham
 Boston Edison, Boston
 Boston Financial Property Management, Boston
 Brazonics, Amesbury
 Brigham & Women's Hospital, Boston
 Brimfield Precision, Inc., Brimfield
 Business Beginnings, Peabody
 CPC Engineering Corporation, Sturbridge
 CWW Realty Company, Springfield
 Cambridge BioScience, Worcester
 Cambridge Scientific, Belmont
 Cavallaro Plastics, Inc., Pittsfield
 Chaulk Ambulance Service, Natick
 Chelsea Memorial Health Center, Chelsea
 Chemfix Technologies, Inc., Salem
 Classic Engineering, Middleton
 Codex Corporation, Canton
 Collaborative Research, Inc., Bedford
 Commonwealth BioVentures, Inc., Worcester
 Compugraphic Corporation, Wakefield
 Computer Systems & Software, Leominster
 Conant Ball Company, Gardner
 Consolidated Group, Inc., Framingham
 Coolidge Investment Corporation, Boston
 Copley Systems Corporation, Needham
 Corcoran Management Company, Inc., Braintree
 D & S Manufacturing Corporation, Westfield
 Daisy Systems Corporation, Waltham
 Damon Clinical Laboratories, Needham
 Data Instruments, Inc., Acton
 Datamarine International, Inc., Pocasset
 Datasonics, Inc., Cataumet
 Datel, Mansfield
 Decorative Coverings, Inc., Hatfield
 Deknatel, Fall River
 Depot Distributors of New England, Fitchburg
 Digital Equipment Corporation, Hudson
 DuPont NEN Medical Products, No. Billerica
 Dynamics Research Corporation, Wilmington
 Emhart Corporation, Farmington, CT

Envirotech Operating Services, Leominster
 Erving Paper Mills, Erving
 Ethyl Molded Products Company, Pittsfield
 F.L. Suprenant Wire & Cable, Clinton
 F.W. Lombard Company, So. Ashburnham
 Fairview Machine Company, Inc., Topsfield
 Fallon Service, Inc., Milton
 Fotec, Inc., Boston
 Dr. Solomon Carter Fuller Hospital, Boston
 GEM Industries, Inc., Gardner
 GTE Laboratories, Inc., Waltham
 Galileo Electro-Optics Corporation, Sturbridge
 General Cable Company, Woodbridge, NJ
 General Electric Company, Lynn, Fitchburg, Pittsfield
 Genetics Institute, Cambridge
 Genica Pharmaceuticals Corporation, Worcester
 Genzyme Corporation, Framingham
 Guaranty Bank, Worcester
 Harvard Community Health Plan, Wellesley
 Hassay Savage Company, Turners Falls
 Hemagen Diagnostics, Inc., Waltham
 Hewlett Packard, Waltham
 Hi-Tech Mold & Tool Company, Pittsfield
 Hillcrest Precision Tool, Bradford
 Honeywell Bull, Inc., Brighton
 Hygeia Sciences, Newton
 ImmunoGen, Inc., Cambridge
 Intelco Corporation, Acton
 Interactive Systems Group, Braintree
 International Data Group, Framingham
 International Market Resources, Inc., Wellesley
 Ionics, Inc., Watertown
 J.M.B. Machine & Tool Company, Inc., Haverhill
 Jadco, Inc., Springfield
 James River-Fitchburg, Fitchburg
 Keystone Massachusetts Group, Boston
 Knight Tool Company, Inc., Haverhill
 Koch Membrane Systems, Inc., Lexington
 Kopin Corporation, Taunton
 LTX Corporation, Westwood
 Lahey Clinic Medical Center, Burlington
 Lakewood Mold Company, Inc., Pittsfield
 Laser Pilot, Inc., Auburn
 Leggat McCall Management Co., Inc., Boston
 Liberty Mutual Insurance Group, Boston
 Lowell General Hospital, Lowell
 M & H Engineering Company, Inc., Danvers
 MA/COM, Inc., Burlington
 Magnus Molding, Inc., Pittsfield
 F.R. Mahoney & Associates, Inc., Hingham
 Marketechs, Inc., Wellesley
 Massachusetts General Hospital, Boston
 Mass Transfer Systems, Inc., Fall River
 Massachusetts Eye and Ear Infirmary, Boston
 McCormack & Dodge, Natick
 McKenzie and Company, Inc., Pittsfield
 Mechanics Bank, Worcester
 Memtek Corporation, Billerica
 Metcalf & Eddy, Inc., Wakefield
 MetraByte Corporation, Taunton
 Metritape, Inc., Littleton
 Milex Tune-up Center, Springfield
 Millipore Corporation, Bedford
 Mobil Solar Energy Corporation, Billerica
 Modern Contract Furniture, Inc., Gardner
 Moldmaster Engineering, Inc., Pittsfield
 Morgan Construction Company, Worcester
 Morrison Sales & Service, Bennington, VT
 Mount Auburn Hospital, Cambridge
 Mutual Precision, Inc., W. Springfield
 NEC Information Systems, Inc., Boxboro
 New England Apple Products Co., Inc., Littleton
 New England Medical Center, Boston
 New England Plating Company, Inc., Worcester
 New England Power Service Co., Westborough

New England Telephone, Boston
 Newton-Wellesley Hospital, Newton
 Nichols and Stone Company, Gardner
 North East Solvents, No. Andover
 Norton Company, Northboro, Worcester
 Office Specialists, Burlington
 Ofit, Billerica
 PTM Industries Corporation, Westfield
 Panametrics, Waltham
 Paul Revere Insurance Company, Worcester
 Peabody Properties, Inc., Braintree
 Pen Ro Mold & Tool, Inc., Pittsfield
 People's Savings Bank, Worcester
 Perini Corporation, Framingham
 Plastic Distributors & Fabricators, Haverhill
 Plastics Tech Labs, Inc., Pittsfield
 Pneumatic Scale Corporation, Quincy
 Polaroid Corporation, Cambridge
 Poly-Matrix, Inc., Pittsfield
 Pond Brook Machining, Inc., West Springfield
 Pope Machinery, Inc., Haverhill
 Poseidon, Inc., No. Falmouth
 Precision Mold Company, Inc., Pittsfield
 Prime Computer, Inc., Natick
 Printing Institute, Natick
 Pro Corporation, Florence
 RTS Technology, Inc., No. Andover
 Raytheon Company, Andover
 Reed Plastics Corporation, Holden
 Reitzel Associates, Bolyston
 Rexnord, Springfield
 Richwell Mold & Tool Company, Inc., Pittsfield
 Romicon, Inc., Woburn
 Sandor Tool Company, Inc., Lawrence
 Seaman Paper Company, Baldwinville
 Sepracor, Inc., Marlboro
 Serono Laboratories, Randolph
 Service Information Systems, Inc., Boston
 Shawmut Worcester County Bank, Worcester
 Simplex Time Recorder Company, Gardner
 Sippican Ocean Systems, Inc., Marion
 Sisson Engineering, Northfield
 Spire Corporation, Bedford
 Sprague Electric Company, No. Adams
 St. Margaret's Hospital for Women, Boston
 St. Vincent Hospital, Inc., Worcester
 State Mutual Companies, Worcester
 Stone & Webster Engineering Corp., Boston
 Stride Rite Corporation, Cambridge
 Stuart Allyn Company, Inc., Pittsfield
 Syntronics, Pittsfield
 Tau-Tron, Inc., Westford
 Tech Tool Grinding & Supply, Pittsfield
 Technographics, Inc., Fitchburg
 Tektronix, Inc., Lexington
 Temple Stuart Company, Baldwinville
 Texas Instruments, Inc., Attleboro
 The Gillette Company, Boston
 The Middlesex News, Framingham
 The Writing Company, Cambridge
 Tog Mold Tool & Die Company, Inc., Pittsfield
 Typeworld, Salem, NH
 University Hospital, Boston
 Vinfen Corporation, Boston
 Volt Temporary Services, Woburn
 VWR Scientific, Boston
 Walker Scientific, Inc., Worcester
 Wang Laboratories, Inc., Boston, Lawrence, Lowell
 Westford Anodizing Corporation, Westford
 Winn Management Company, Boston
 Worcester Insurance Company, Worcester
 Worcester Memorial Hospital, Worcester
 Wyman Gordon Company, No. Grafton
 Xyvision, Wakefield
 Zymark Corporation, Hopkinton



Bay State Skills Corporation
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1981

1982

1983

“Partnerships are like spinach:

1984

nobody really likes them, but

1985

everyone says they're good for you.”

1986

1987

1988

1989



1990

1991